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AGRICULTURAL MEMORANDUM NO 585a

Endemic Nephropathy - Bulgaria L P SMITH

An error occurs in the penultimate line of figures on page 2 of Agricultural Memorandum 585, where, under Rp 127 should read 27. The whole of page 2 should now read as follows:-

Then if R is excess rain in a given year (Year 2)
Rp is excess rain in the previous year (Year 1)
and D is number of deaths from October in the given year (Year 2)
till September 24 months later (Year 4)
$D = 0.51\,Rp + 0.44R - 7.3$
with a multiple correlation of 0.80
The correlation of D on (R + Rp) is 0.78
A similar formula is found if deaths are considered within the next 2 calendar years (Years 3 & 4).

| Year of deaths | Deaths | R | Rp | Estimated deaths | Deaths in Year 4 |
|---|---|---|---|---|---|
| 1961 Oct-1963 Sept | 34 | 51 | 30 | 30 | 11 |
| 1962 - 1964 | 47 | 107 | 51 | 66 | 35 |
| 1963 - 1965 | 64 | 72 | 107 | 80 | 37 |
| 1964 - 1966 | 75 | 125 | 72 | 85 | 39 |
| 1965 - 1967 | 80 | 37 | 125 | 73 | 45 |
| 1966 - 1968 | 94 | 167 | 37 | 85 | 52 |
| 1967 - 1969 | 110 | 27 | 167 | 90 | 55 |
| 1968 - 1970 | 88 | 140 | 27 | 69 | 32 |
| 1969 - 1971 | 73 | 44 | 140 | 83 | 37 |

There is a high correlation between (R + Rp) on the deaths two years later, listed in the last column, 0.87; the partial correlations are 0.75 and 0.83, with a simple regression $0.3\,(R + Rp) - 13.2$
In the absence of morbidity data the importance of this apparent 24 month delay in effect cannot be verified, but it is significant that it is thought that sufferers from the disease die more quickly in Rumania than in Bulgaria.

Any comments or suggestions on this paper should be referred to the author.

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Bracknell

December 1973